

## 10. RESOURCE REQUIREMENTS

### 10.1 Physical Resources

#### Total Space Requirements

The total space for lecture room, tutorial rooms and drawing halls, various laboratories/workshops may be worked out as per AICTE norms. The following workshops and laboratories are recommended:

- i) **SPINNING WORKSHOP**
  - (i) Carding and Draw Frame section; comber section
  - (ii) Simplex, ring frame and doubling section ( 2x70x40 sq.ft)
- ii) **WEAVING WORKSHOP**  
(Handloom Section; Winding Section; Warping, drawing-in and Denting Section; Power Loom Section; Fancy Weaving and Shuttle less machine section) 2x70x40 sq.ft
- iii) **WORKSHOP**  
(Carpentary; Fitting; Machine and Welding) 70x40 sq.ft
- iv) Textile Chemistry Laboratory (2x40x30 sq. ft) .
- v) Textile Testing and Quality Control Lab (25x60 sq.ft)
- vi) Computer Laboratory (45x25 sq.ft)
- vii) Designing Lab (2x60x25 sq.ft)

#### LIST OF EQUIPMENT

Sr.No.	Particulars	Qty.
<b>TEXTILE TESTING AND QUALITY CONTROL</b>		
1.	Projection Microscope	1
2.	Fibre Length Testing Machine	1
3.	Fibre fineness Testing Machine	1
4.	Whirling Hygrometer	1
5.	Electronic Moisture Meter	1
6.	Trash content Analyser	1
7.	Analytical/Chemical Balance	1
8.	Digital Balance.	1
9.	Knowle's Yarn Balance	1
10.	Digital Yarn Count Balance	1
11.	Beasley's Yarn Balance	1

12.	Sliver, Roving Measuring Wrapblock	2
13.	Single Yarn Strength and Count Testing Machine	1
14.	Multilevel Tester	1
15.	Ballistic Strength Tester	1
16.	Yarn Twist Tester	1
17.	Power Driven Wrap reel	1
18.	Fabric Strength Tester	1
19.	Fabric bursting Strength Tester	1
20.	Fabric Abrasion Tester	1
21.	Yarn Evenness Tester(Electronic)	1
22.	Crimp Meter	1
23.	Fabric Air Permeability Tester	1
24.	Crease Recovery Tester	1
25.	Pick Glasses	30

### **WEAVING AND DESIGNING LABORATORY**

26.	Power loom fitted with terry mechanism reed space 48"	1
27.	Power loom fitted with jacquard 400 hook Reed Space 48"	1
28.	Reed space 48"	2
29.	Power loom fitted with drop box 4x1 48"	1
30.	Handloom 40" ..	4
31.	Hand loom fitted with jacquard 200' Hooks	1
32.	Sectional Warping Machine with Creel(Creel capacity 208 cones section width)	1
33.	Card Cutting Machine Coarse Pitch	1
34.	Card Cutting Machine Fine Pitch	1
35.	Pirn ordinary winding machine 8 spindle	1
36.	Automatic (Hacoba) pirn Winding 4 Spindle	1
37.	Dobby 16 lever	2
38.	Cam Dobby 24 levers	1
39.	Hollow cop PIRN winder 6 spindle	1
40.	Shuttleless loom (Projectile)	1
41.	Air Jet loom	1

### **SPINNING MACHINES**

42.	Complete B/R line of 2 to 3 beating points with seutcher (single process)	1
43.	Carding machine (Lab. Model or miniature card preferred)	1
44.	Draw frame (Single or Two delivery D/F)	1
45.	Simplex machine up to 24 spindles	1
46.	Ring frame upto 48 spindles	1
47.	Doubling machine up to 24 spindles	1
48.	Sliver lap machine	1
49.	Ribbon lap machine	1
50.	Comber	1

## COMPUTER LABORATORY

51.	High speed, high memory PC systems of latest version and configuration) i 7 processor with 16 GB Ram	
52.	Laser Printers (or desk jet coloured Printers)	
53.	Scanner (Flat bed coloured)	
54.	Graphics slates	
55.	Plotters	
56.	Networking must be installed	
57.	UPS (as per requirement)	
58.	CVT (as per the requirement)	
59.	Software Required: a) Windows (latest) b) Corel Draw illustrator, Photoshop c) Any software related to Woven/Printed/Embroidered designs/for example Ned graphics/Textronics/Wilcome DECO STUDIO d) MS Office e) Graphics Application Software	

## DYEING AND PRINTING

60	Electric Heater Dyeing bath/water bath	5
61	Physical Balance	2
62	Electric Heater/Hot Plate	2
63	Laboratory Model Drying oven	1
64	Stainless steel glass with ring	50
65	Stainless steel beakers	20
66.	Stainless steel rods	50
67.	Measuring glass cylinders (Cap 500 cc, 250 CC, 100 cc, 50 cc, 10 cc)	10
68.	Lab Model hydroextractor machine	1
69.	pH Meter	1
70.	Stainless steel patilas (20 litre cap) Plastic Bucket (20 litre cap)	2
71.	Iron Bucket (20 litre cap)	2
72.	Test Tube Holders	2
73.	Glass tube (Glass)	24
74.	Glass Bottles 250 cc	250
75.	Glass Bottles 500 cc	100
76.	Laboratory model winch dyeing machine	1
77.	Laboratory Model Jigger Dyeing machine	1

	<b>DESIGNING LAB</b>	
78	Display Board 72"x36inches	5
79	Drawing Boards Medium Size	20
80	Tracing Table with glass 40"x30"x30"	5
81	Study tables with box required for rawing purpose a) T able32x26x24 b) Stools	20 18
82	LCD TV (with USB) and CPU (wi-fi)	1

## **10.2 Human Resources**

Weekly work schedule, annual work schedule, student-teacher ratio for various group and class size, staffing pattern, work load norms, qualifications, experience and job description of teaching staff, workshop staff and other administrative staff may be worked out as per norms and standards laid down by AICTE. The website [www.aicte.ernet.in](http://www.aicte.ernet.in) may be referred for downloading current norms and standards pertaining to technician courses.